

KENYA METHODIST UNIVERSITY
FIRST TRIMESTER EXAMINATIONS, APRIL 2009

FACULTY : **ARTS AND SCIENCES**
DEPARTMENT : **COMPUTER INFORMATION SYSTEMS**
COURSE CODE : **CISY 202**
COURSE TITLE : **OPERATING SYSTEMS LAB**
TIME : **2 HOURS**

Instructions:

Answer ALL questions in Section A and any other TWO questions in Section B.

Section A (30 Marks)

- a. What are the three main objectives of an operating system?
(3 Marks)
- b. What is a process? (1 Mark)
- c. With reference to the structure of LINUX, define the following terminologies.
- i. Kernel
 - ii. Shell
 - iii. Utility programs (6 marks)
- d. Linux has six runlevels that can be employed by an administrator to cater for different situations. Analyze two runlevels that exist in Linux clearly pointing out when each could be used.
(4 marks)
- e. List four different shells for LINUX operating system. (4 marks)
- f. Linux is an open source Operating system? Explain giving four examples.
(4 Marks)
- g. State and explain five advantages of Linux OS over Windows OS?
(5 Marks)
- h. Briefly describe the difference between GNOME and KDE environments
(3 marks)

Section B (30 Marks)

Question Two (15 Marks)

a) Discuss five file systems supported by Linux. (10 marks)

b) Discuss the use and/or effects of the following shell commands.

iv. \$ set

v. \$ who am I

vi. \$ who

vii. \$ pwd

viii. \$ clear. (5 marks)

Question Three (15 Marks)

a) Identify and discuss two forms of authentication in Linux operating systems (6 marks)

b) What is a daemon in Linux, Explain using Linux commands how u can start and stop a daemon? (6 marks)

c) List three editors that are used under Linux operating systems. (3 marks)

Question Four (15 Marks)

a) Define the term 'redirection' and hence give examples. (5 marks)

b) Briefly explain the meaning of the following Linux Commands used in the X window terminal
apropos, cat, cd, man, pwd , passwd, info ls, file and exit
(10 marks)